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EXAMINER
NGUYEN, VAN H

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 December 2003</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>33-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>33-39</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail. Date _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to amendment A filed December 04, 2003. Claims 33-

39 remain in this application.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign
country or in public use or on sale in this country, more than one year prior to the date of
application for patent in the United States.

3.   Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by **Boldo et al.** U.S.

(5,675,805)

4.   **As to claim 33,** Boldo teaches *(abstract)* the invention as claimed including a remote

procedure call optimizing method for optimizing RPCs *(procedures...to be called by a remote*

procedure call) between a server *(server)* offering at least one remote procedure, and a client

(client) carrying out processing by use of a RPC calling said at least one remote procedure, on a

computer for executing at least one of a program or a program part, when an interface definition

language description *(interface definition files)* for said at least one remote procedure is

provided, said remote procedure call optimizing method comprising the steps of:

- analyzing a source code of said client so as to detect a remote procedure execution

sequence constituting a set of RPCs that are highly likely to be executed successively *(col.2,*

lines 27-35);

- determining a new remote procedure for executing said remote procedure execution

sequence in a single RPC and defining an interface of said new remote procedure having been

determined into said IDL description so as to allow said client to call said new remote procedure

(col.2, lines 46-52).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

6.   Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Boldo et al.**

in view of **Gidron** et al. *"An RPC-Based methodology for Client/Server Application*

Development in C+ +" pp. 39-46, 1997 IEEE.

7.   **As to claim 34,** the rejection of claim 33 above is incorporated herein in full. Claim 34,

however, further recites:

>   - inputting a source code of said client and said IDL description;

>   - calculating a first procedure causing said server to carryout a process equivalent to said

processing part;

>   - replacing said processing part of said client source code with a call to said first

procedure, thereby generating a new client source code; and

>   - adding a definition of said first procedure to a source code of said server.

>   Boldo teaches:

>   - inputting a source code of said client and said IDL description *(col.4, line 31-col.5, line*

9 and figs 1-2);

>   - replacing said processing part of said client source code with a call to said first

procedure, thereby generating a new client source code and adding a definition of said first

procedure to a source code of said server *(col.4, line 31-col.5, line 9 and col.21, lines 43).*

>   Boldo does not explicitly teach "calculating a first procedure causing said server to

carryout a process equivalent to said processing part."

>   Gidron teaches calculating a first procedure causing said server to carryout a process

equivalent to said processing part *(the cal_RPC() function; page 45).*

>   It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to apply the teaching of Gidron to include *the cal_RPC() function* in the

system of Boldo because it would have provided the capability for efficiently performing remote

procedure calls between the client and the server in the Boldo's system.

8.   **As to claim 37,** Boldo teaches inputting said new IDL source code to an IDL compiler

which in turn outputs a client stub, an RPC header file and a server stub; and compiling and

linking said client stub, said RPC header file and said server stub, as well as said new client

Source code of each client and said new server source code of each server, thereby outputting a

client object and a server object *(col.4, lines 31-67 and figs 1-2);*

9.   **As to claim 35,** the rejection of claim 34 above is incorporated herein in full. Claim 35,

however, further recites "generating an additional server source code for accommodating

connection between said interface of said first procedure and an original source code of said

server."

Boldo teaches generating an additional server source code for accommodating connection

between said interface of said first procedure and an original source code of said server *(col.4,*

lines 31-67).

10.   **As to claim 36,** refer to claim 37 above. Claim 36, however, further recites dynamically

linking said additional server object and a server object to output a new server object; executing

said first client object on a first computer; transmitting an RPC from said client object in order to

execute said client object on said first computer; and executing on a second computer said new

server object having received said RPC.

Boldo teaches dynamically linking said additional server object and a server object to

output a new server object *(col. 4, lines 64-67)*; executing said first client object on a first

computer *(col.5, lines 1-8)*; transmitting an RPC from said client object in order to execute said

client object on said first computer; and executing on a second computer said new server object

having received said RPC *(col.2, lines 46-52).*

11.   Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Boldo et al.**

in view of **Gidron** et al. as applied to claim 35 above , and further in view of **Scheifler** (U.S.

6,282,652 B1).

12.   **As to claim 38,** the combination of Gidron and Boldo does not explicitly teach a Java

virtual machine and a remote method invocation compiler.

        Scheifler teaches a Java virtual machine and a remote method invocation compiler *(fig.3*

and col.7, lines 35-40).

        It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teachings of Scheifler in the system of Boldo as modified by

Gidron because it would have added flexibility to the system of Boldo.

13.   **As to claim 39,** includes the same limitations as in claim 38, and is similarly rejected

under the same rationale.

Response to Arguments

14.   Applicant's arguments filed on December 04, 2003 have been fully considered, but are

deemed to be moot in view of the new grounds of rejection necessitated by Applicant's

amendments.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(x). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(x).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

Any response to this action should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450
or fax to:
(703) 746-7239 (for formal communications intended for entry)
(703) 746-7238 (for After Final communications)
(703) 746-7240 (for informal or draft communications)

VHN
February 17, 2004

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